

# Clinton County non-profit farm strives to provide free meals

By CARL GINGERICH cgingerich@ftimes.com

A husband-and-wife duo launched their nonprofit farm to provide meals to those in need.

Evan and Autumn Overbay are credited with creating the Highland Heights notfor-profit farm and organization. The duo transitioned the farm into a non-profit organization in 2020 after seeing a need for fresh and accessible produce in Clinton County and the surrounding area.

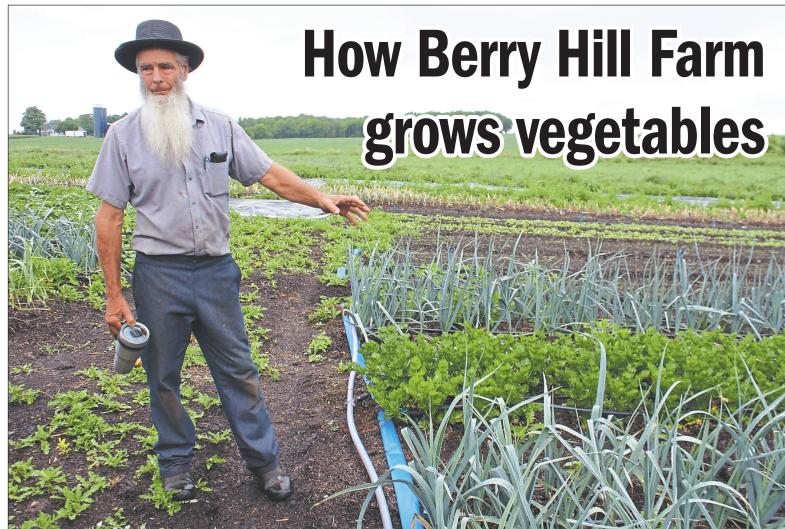
Evan Overbay claimed that the main mission of the farm is to serve the impoverished community by improving food access and workforce development. Overbay stated that the food grown on the farm is donated back into the community through food pantries, and the duo is striving to provide half a million meals throughout the year to those in need. Highland Heights currently provides approximately 25,000 meals per year.

"Our overall vision of the farm is half a million meals given away a year and 100 people running through our program," said Overbay.

See FARM, page E7



Photo courtesy of Highland Heights Evan Overbay, right, donates produce to chef Charity at Thy Kingdom Crumb: Indianapolis.



In early August, Myron Metzger leads a tour of Berry Hill Farm near North Manchester. The farm began in 2003 and, though they are no longer certified organic, they still follow many of the same practices

# Wabash County property owner gives tours to show off their operation



By ROB BURGESS

Wabash Plain Dealer Editor

In early August, Myron Metzger was leading a tour of Berry Hill Farm near North Manchester when he laid down his philosophy of doing business.

construcgrowing up watching his father do the same. Before they would start a job, they would price everything out. He said he did the same before thinking about

planting a crop.
"I started doing just like as if I was going to build a house. I figured the materials. I figured the labor. Added a it's going to cost

you. You decide. 'Do you want me to build you a house or not?' Usually, they would say, 'Yeah," said Metzger. "So I started applying that same thing here. How

long does it take me to make a bag of carrots? There's seed in there. There's overhead. For every hour I'm spending in that carrot bed I need to have \$30 to \$40 for that hour. It's got to be. If it ain't, I'm not paying my bills."

Metzger was standing in front of Metzger said he a bed full of long rows of carrots growing just underneath the soil. tion for a time after He pointed to the green tops. He said this crop had done particularly well in sales this year, despite the product being more costly than what consumers might be used to in the grocery store.

"That's why I'm \$4 for a pound of carrots. You buy them in town for less than \$2. But, it ain't the same carrot. People come and get them so they're telling me what's going on," said Metzger. "You can't let industrial ag set the parameters. You've got to set your own parameters."

The event was a part of a threemargin. This is what day "How We Grow Vegetables" Tour. Metzger led small groups around the property's open vegetable beds and their hoop and greenhouses.

See **BERRY HILL**, page E2

# Clinton County flower farm shows promise for local business

By CARL GINGERICH cgingerich@ftimes.com

A Clinton County business owner began a farm two years ago with the intention to provide the community with innovative, unique and classic flowers grown near

J&H Farm was created in 2020 after Heather Wright, owner of Heather's Flowers in Clinton County, and her husband John Wright decided to grow their own flower stock to ensure the quality and quantity of the flowers available at the business. The farm hosts a large variety of flowers in just under 10 acres.

Wright says that she used local growers for many years of J&H Farm and was well- how much is grown and before collaborating with her



John Wright carries bucket of fresh-picked flowers through the

versed in growing techniques husband to begin the flower and methods, and Wright refarm. Wright's husband was alized that growing her own a farmer at the family farm flowers would allow for her prior to the establishment to control what is grown,

what methods are utilized during the growing period. Wright said that the farm

See **FLOWERS**, page E6

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**E2** October 8-9, 2022 Chronicle-Tribune



Photo provided by Indiana State Department of Agriculture

The Wright Family poses with their centennial and sesquicentennial Hoosier Homestead Awards for owning and maintaining a farm within the same family for 183 years.

# Grant County farm recognized with Hoosier Homestead Sesquicentennial Award

**By TAYLOR FRYMIER** tfrymier@chronicle-tribune.com

Having been in operation since 1839, the Wright Farm in Jonesboro recently received Hoosier Homestead Centennial and Sesquicentennial awards.

"Our roots are in agriculture," Donald Wright told the Marion Chronicle-Tribune on Wednesday afternoon. "It's just important to be recognized of our long heritage of being involved in farming and owning farmland."

Wright shared that his great-grandfather, Harrison Powell, bought the deed Land Office of the United States on Sept. 20, 1839. He then built the homestead and farm there which was originally used to raise cattle and

According to Wright, the The Wright Farm was operations started," State stood there for over a century was laid "the day fort at the onset of the Civil War culture. (1862)."

Today, the 82.5 acre farm is maintained and cultivated by Wright's brother and nephew, and has transitioned from livestock to corn and soybeans. Wright estimated that the pair pull in well over 200 bushels per acre of corn and 50 bushels per acre of soybeans each harvest.

Though the Wright family received recognition for 100 and 150 years owned and to the land from the General maintained by their family, the farm has actually been active for 183 years and will, therefore, likely receive the bicentennial award as long as the Wrights retain the home-

Indiana State Fair for their the

"Agriculture continues to play a key role in our state's history and economic success," State Representative Tony Cook said at the ceremony. "For the same family to run a farm for more family for this impressive acthan a century is an incredible accomplishment, and I congratulate them on this achievement."

Farms owned and maintained by the same family for 100 years or more can qualify for centennial (100 years), sesquicentennial (150 years) or bicentennial (200 years) Hoosier Homestead awards.

"When driving through our district, I pass by fields and farms and wonder how these isda.

foundation of the house that amongst over 100 awardees Senator Travis Holdman said recently recognized at the during the ceremony. "With Hoosier Homestead Sumter was being fired upon commitment to Indiana agri- awards, families and the state get to take time to understand the history of each awarded farm and celebrate past and present family farmers who tirelessly worked to maintain a great level of success. I congratulate the Wright complishment."

Each year, two awards ceremonies are held in the spring and summer commemorating the achievements of farm families across the state. Since its inception in 1976, more than 5,800 farms received the designation as Hoosier Homesteads.

For more information on the Hoosier Homestead Award Program, visit in.gov/

#### **BERRY HILL**

From page E1

Metzger said they grow "wholesome food for wellness-minded people.'

"Berry Hill Farm began in 2003 with one acre of blueberries. Our focus at that point was to be engaged in a family-friendly activity. We soon realized that a great benefit was the interaction with our customers. While it is essential in any business to make enough profit to pay the bills and provide a living wage for those involved, we have found great fulfillment in bringing good food to people who appreciate it," said Metzger. "In the past, we have been USDA Certified Organic, however through customer feedback and a careful evaluation of plant and soil health, we to not certify organic, but instead apply that time and energy toward plant and soil care. Our guiding principles teach us to nurture soil biolcarbon, preserve soil nutrition and cultivate plants that will produce delicious fruits and veggies that are deeply nutritious. Through the use of greenhouses, winter covers and storage facilities we can keep fresh produce haven't bothered the lettuce, available 12 months of the year."

Metzger said most of the beds on the property haven't been tilled since 2014 or 2015.

"Underneath the plastic is the crop that's done. Pull the dead and the worms have already eaten a bunch of it. Put on compost and a layer of leaves," said Metzger.

Metzger said they have found cover crops to be extremely important between the nightshade family. If growing seasons.

"The last thing you do is leave bare dirt. It's just like of slow," said Metzger. "We never having your belly out in the sun and take your shirt off and go lay in it for all day long. It'll just cook you. That's what it does to bare dirt," said Metzger.



Photo by Rob Burgess / Plain Dealer The farm's seedlings often start under these special indoor growing lamps.

Metzger said they don't do any mechanical harvesting on the farm.

"We've always been small scale enough that it didn't our biological approach to make sense," said Metzger. "If everybody farmed like made the difficult decision this, there would be no global warming. You'd take it out. That by itself. You could burn all the oil and fossil fuels you wanted to. But where a lot of it is ogy in ways that sequester coming from is these fields where they're working them and kicking that carbon out. It just floods out. Also the inputs, the synthetics, they're all carbon-based."

Metzger said as far as animal intruders go, the deer but they do enjoy the strawberries and sometimes the sweet potatoes.

Metzger said his melons hadn't grown very well this year, but he wasn't sure exactly why.

"If I was a melon farmtarp over it and in six weeks er I'd be going and finding or a month, it's laid down a job somewhere," said But, Metzger said other,

> unexpected factors also affected the output of other plants. "Kale is antagonistic to

> you have kale beside your tomatoes, they'll grow kind learn as we go. Lots of things to learn."

> Rob Burgess, Wabash Plain Dealer editor, may be reached by email at rburgess@wabashplain dealer.com.







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Chronicle-Tribune October 8-9, 2022 **E3** 



Photos by Evan Mathews / emathews@perutribune.com ABOVE: Parents and schools take children to McClure's to show them where and how food gets produced. RIGHT: Jerry McClure shows off the corn maze, the newest addition to the McClure Orchard and Winery. BELOW RIGHT: Grapes grow on McClure's Miami County property.



# McClure's Orchard maximizes land productivity through diversity

By EVAN MATHEWS

emathews@perutribune.com

Jerry McClure says his family's Miami County business – McClure Orchard and Winery – is thriving through diversification of its crops.

Not only does the orchard grow apples, pears, berries and grapes, but has a winery and cafe, beehives, a corn maze and other crops.

McClure bought the 80 acres 24 years ago and has land. His children Megan and Jason, and Jason's wife in the farm. One of the keys to success is maximizing the utility of the land and prowhat it can properly yield.

When asked about the diversity of crops on only 80 to seed. It becomes a bushy acres, McClure responded, fern with small berries that "I'm glad you brought that up. These folks from Purdue Ferning out is essential to said, 'I can't believe what all following year. you guys do here."

farm, he pointed out the difknowing them by sight. The varieties of grapes. orchard's website boasts that

ples and has 7,000 trees. The ana wine," he said. "These public can avail themselves grapes would not do well in of U-pick times at the or-

McClure is particularly fond of his bees, who are crucial pollinators. The orchard usually keeps about 20 hives. When it comes time to pollinate crops, McClure sometimes has beekeepers from Logansport come in for extra help to continue production.

"If we don't have bees, immersed himself in the we'll lose probably 80 percent of our crop," he said.
While pears are anoth-

Alison, have taken key roles er fruit that grows on trees, McClure has not limited the farm to orchard crops. Red and black raspberries are in duction. The family does abundance, as is asparagus. this by knowing the land and Asparagus has about a sixto-eight week production life and is then allowed to go look like baby tomatoes.

McClure pointed out his zoo and tractor rides. As he drove around the grapes as he drove through the farm in his small truck. cated at 5054 N US Hwy 31 ferent varieties of apples, He cultivates five different in Peru, Indiana. The Toll

California."

Wine and cider tastings are popular events for visitors to the farm.

Another different way to use a crop is the corn maze the farm has added. Visitors can navigate the maze and then stop and eat at the cafe, Apple Barn, or Food Trailer. Wine and cider can be tasted at the Cider House and Bake Shop on the property.

The McClures have also diversified by adding retail space in a downtown facility they call the Granary and Tollhouse. The Granary Market in downtown Peru not only has agricultural products but children's clothes and books and gifts. The Tollhouse sells ladies clothing, home decor, gifts and Christmas decor.

Seasonal activities are part of the operation, such as apple picking and the pumpkin (University) came down, and having a good crop in the patch. They have also added an adventure area, petting

The Orchard/Farm is lo-House & Granary location is "Good grapes to grow in located in Downtown Peru at it grows 150 varieties of ap- Indiana, to grow good Indi- 159 S. Broadway.



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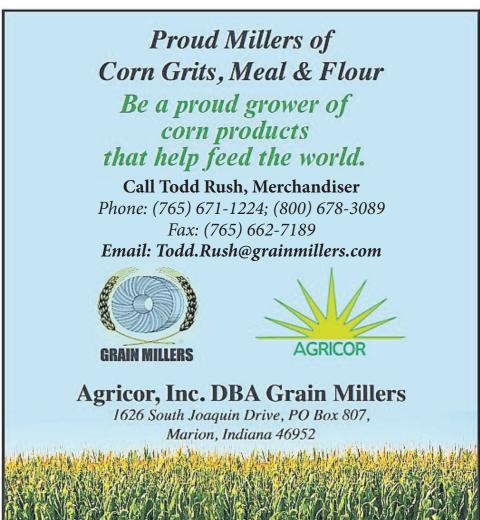
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**E6** October 8-9, 2022 Chronicle-Tribune

# Farmers make strides to protect the environment, produce a product

Aeriel applications fly close to the ground

By ILENE HALUSKA ihaluska@H-Ponline.com

Farmers experience everything that others do. They encounter difficulties finding people to work for them, get accused of polluting the land, all while living and working in the same environments as everyone else.

Yet many say that they have made great strides in progrowing a product.



on the family farm and went on to Purdue to school of ag and wanted to do something in

"I grew up

agriculture, equipment, seed and ag retail," said Erich Eller.

"Nine years ago, my wife and I started Agronomic and Precision, now Forefront Ag Solutions," he said, adding that they consult with farmers, and the farmers take it from there.

"We work with farmers to find out how to best use agronomic products that's safe for the environment but also have the highest economic impact for their operation," he said, and they don't waste the product to keep costs down, so it's good for the checkbook as well.

"One of the biggest things we are involved in is going out in the spring and pulling soil samples and that helps identify nutrients, nitrogen, phosphorus and potassium. The fields vary across the acres of different levels and when we go back in and apply the right amount of nutrients for the crop that's going

to be grown." Eller says that the way prices are now it comes to several hundred dollars per acre for aerial applications.

Over the years, it has changed when one would see airplanes flying over the crops fields. What people used to see was a gray cloud, which was mostly water mixed with herbicides. Now the spray isn't airborne, Eller explained, and it gets sprayed over the crops as much as possible.

"It varies between operators, but they can get pretty close," Eller said.

Eller compared an acre of land with a football field including the end zones tecting the environment and and infields. When it rains, one inch of rain adds up to 27,154 gallons of water in the field.

> In aerial applications, they fly low because they're putting 2 to 3 gallons of water mixed with 10 to 15 ounces of herbicide per acre.

> "It's pretty hard for that product to leach out of the fields," Eller said. He wants to protect the environment and the products he produces, because it is his liveli-

"One of the things is, why do we use airplanes? One, they can cover a lot of acres in a very short time. And two, these diseases come in on very foggy mornings and an airplane flying over it is so you're not driving over crops," he said.

Terry Kieffer, a Huntington farmer, who owns just under 5,000 acres says the biggest challenge to farming now are

Years ago when they didn't have GPS, a guy ran from one side of the field to the other with a flag and the plane had to look for it, he said of aerial applications.

Farmers live in the same environments as other people. They need employees like other employers do. Farmers need workers who have commercial driver's licenses (CDLs) and there's still a need in farming for manual labor, he explained.

Kieffer says that every day is different, too. He has two ations, he hopes to come.

part-time guys in the fall, and they work on combines and fetters that go into the field. They also go in the shop maintaining equipment and changing belts to have the combines ready to harvest the crop.

He compared it to maintaining your car before going on a vacation or for the next season.

"We've got to do that when it's time to harvest." Kieffer said. When they start harvesting, depending on the weather, corn has to have so many days of high temperature and beans will need hours of sunlight. During harvest they need to clean trucks for cross contamination.

"The soybeans I plant are for seed stock and mine are that variety, that get cleaned and sorted before being planted," he said.

"Aerial crop spraying is for corn," Kieffer said. The ground truck sprayers aren't tall enough to go over the corn stalks and the aerial applications have testing, training and equipment that is spot on." He's flown with one and says they fly quickly and need to watch what they

"We do aerial fungicide because we want to keep that plant healthy, to prevent diseases," he said. Farmers can get docked at the elevators for unhealthy stalks and lose money. "It's like spilling your cup full of milk and not being able to get it back."

Kiefer says he's the fourth generation in his family's 100-year-old farm since his great grandpa came here from Virginia. He graduated in 1991 from Huntington North High School and after that took a Purdue Ag short course. He considers himself a full-time farmer. He said he has a daughter going to school in agronomy, which is the science of soil management, another in nursing, and a son in high school planning to come back, and for gener-

#### **FLOWERS**

also allows for trial and error when experimenting with new varieties of flowers. Wright stated that some of the flowers she was receiving were not lasting as long as she would prefer, so she narrowed the flowers down to fit what she liked and needed, which are large flowers that last throughout multiple weeks. The main flower Wright highlighted were her sunflowers, which she narrowed down to three different varieties meant to fulfill her preferences.

"The sunflowers are such a big hit, and sunflowers are so plentiful as long as they're a long-lasting variety," said Wright. "You could go to a farmers market, and they might have sunflowers too. but there's so many different varieties, and they're all unique, but my sunflowers are meant to last."

Wright claimed that the flower farm provides a means for her florist business to stand out amongst other flower shops across the region due to the care and science behind the soils and fertilizers used at the farm.

"Everything I have (my husband) grow, it's like on steroids almost. We have special solutions and special growing methods," said Wright. "My dad is a genius when it comes to growing and ways to put nutrients in the soil, so we have special concoctions that we use to make things bigger and better."

One of Wright's favorite flowers to grow is a peony, but she stated that the commonality of the peony and its difficult propagation may cause issues with the farm al years, but this is the first lized for pickling and eatand sales, so her favorite flowers to grow are sunflowers and alliums.

those are one thing that I've never been able to get that big anywhere else, so those are one of my favorites," said Wright. "We had varmints get into them this year, so we didn't have as many, but I iust love them."



John Wright poses with the sunflower yield.

starburst alliums, which she claims are unavailable locally other than what her phocarpus nicknamed "hairy balls," "balloon plant" or "giant "The seasons last for so swan milkweed." The plant long. There are so many attraction for pollinators, which benefits the surrounding flowers and the environ-

ment as a whole. "(They're) so conversation-starter-like. They're in the milkweed family, so they blooms and attract a ton of butterflies. We put these in these?" and they'll want to touch them," said Wright. "I've had these for severyear that (my husband) grew

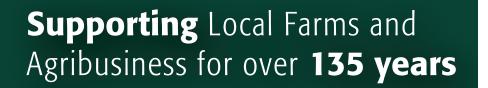
them." When the growing season returns to purchasing flowers from the local growers grown in the garden. that she used to always utilize. The growers receive Heather's Flowers or J&H

Wright emphasized the with the seasons and become beauty and structure of her slightly different, such as the gomphocarpus, which dries and becomes a plum color. Wright stated that she does farm provides. Wright also not solely use flowers from highlighted a unique plant her farm for approximately utilized in some of her ar- two or three months during rangements known as gom- the year, typically January physocarpus, to March before the spring flowers begin to bloom.

is known to be a prominent different things that have different phases of growing. Once they start to dry, they look a bit different, and a lot of things will turn into pods, which is really cool," said Wright. "I can use those even at Christmas. I can take attract a lot of bees with their a little bit of spray paint to grasses and turn them different colors, so it might be arrangements that are up a lot at one time, but there's here, and people will be like, so many different phases of 'what are these? What are those flowers, so I can use them for a long time.'

J&H Farm also sports a vegetable garden that is utiing. Heather's Flowers sells homemade pickles, spicy pickles, assorted vegeta-"My alliums are huge, and is not as plentiful, Wright bles, spicy relish and much more utilizing the vegetables

> For more information on flowers from South Ameri- Farm, visit Heather's Flowca, Holland and other areas. ers at 64 E. Washington St. Many of the flowers and on the courthouse square in other plants actually change Frankfort.



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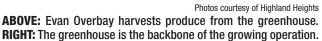


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October 8-9, 2022 **E7** Chronicle-Tribune







**FARM** 

From page E1

"It's a work in progress, but that's our overall vision we're going for."

Overbay claimed that the greenhouse on the property grows approximately 25,000 heads of lettuce each year alongside peppers, herbs and much more. Overbay estimated that the greenhouse sees the plants sprout from seed to harvest in just about four weeks. The greenhouse is equipped with intricate processes and machinery that move nutrient-rich water through the plants to regulate the process and increase efficiency. The farm also grows carrots, sweet potatoes, cucumbers, tomatoes and more

in the outside garden. Highland Heights is a United Way for Clinton County partner, and United Way sponsored the greenhouse this year to help support Highland Height's vision. greenhouse is the backbone of the growing operation and thanked United Way for its

The duo began their gardening journey as farmers market gardeners who do-

market. "We had been farming for about eight years and going to farmers markets. We were sort of your traditional market gardeners. With my wife being a social worker, she was working in town and one thing she noticed was that there wasn't much fresh produce (at food pantries and other helpful organizations)," said Overbay. "That transition was sort of led by the

need in the community." Highland Heights focuses on workforce development alongside the gardening aspect. Overbay stated that the workforce program planning is finished, and the organiza-



workforce.

"The workforce development came out of the food production. Right now, I'm motion, so I start running, by myself and my wife helps and out pops a possum--big nated the leftovers from their when she's off work. Other possum--with a very angry farmers market visits to food than volunteers, that's it, and turkey," said Overbay. "He ing land, but Overbay plans community members, but the will feature a chili cook-off, pantries, but they realized it takes a lot of man hours chased that possum all the to achieve his goal in five that the food was not as fresh to do a huge garden," said as it could be after being in Overbay. "We thought we'd the sun for eight hours at the help those that can't get jobs because there's only one or two jobs in town that will hire someone with a record, then we can call these places and say that they've been through our program and get them jobs, and we need the help."

Alongside the workers and volunteers at Highland Heights, several animals act as farm hands by completing certain tasks, protecting the farm and providing essential goods and nutrients.

Overbay described Paul the goose as the loud spokesman of the farm, and he is paired with a protective turkey that stands guard to protect the farm. The ducks and other tion is currently raising funds birds on the farm are tasked. The facility is expected to

the animals have just as much character as the owners. The turkey in particular breaks through its bashful exterior other animals, such as during

"It was just an awful comway through the gate and off the farm. He was having none of that. He does his

Highland Heights recently received a grant through the Duke Energy Foundation for about \$10,000 that will be used to build a barn. The farm also received a grant from the Centers for Disease Control and the Health Department that have and will pay for tractors and equipment. Overbay highlighted another grant through the government and the Health Department that will help implement a kitchen on the farm in partnership with Purdue. The kitchen will be utilized to teach cooking classes with fresh produce and host community dinners.

expected to launch later this

The main project for Overbay is increasing the number to provide protection for the of meals provided by the farm every year. Accordan incident with a possum in ing to Overbay, the farm will need to acquire about 50 acres to achieve 500,000 meals during the year. Currently, the farm owns slightly more than six acres of farm-

"We're ambitious. We've made big leaps in just the past two years alone as far as what we're doing, all the grants and getting some of the infrastructure in place," said Overbay. "We want to get the word out that we're here and we're here to help."

To achieve his goal, Overbay claimed that the farm needs volunteers. Overbay stated that volunteers are welcome any day of the

planting, watering, running the greenhouse, feeding anexperience is needed. Overbay also stated that positions are available for content creators, public relations, delivery drivers and more. Overbay claimed that this summer 21,000 hours of volunteer

service. Overbay recently launched an "Adopt a Row" fundraiser where community members and families can sponsor a row of produce at the farm for \$250. The row will help feed approximately 75 people and will be adorned with a sign thanking the donor for their aid.

Highland Heights currently donates produce to local food pantries and gardens

and 40 visitors. The project is noon to help with weeding, munities of Clinton County Coalition produce collection, the First Church of the Nazaimals or conducting other rene Church food pantry and farm-related activities. No Thy Kingdom Crumb: Indianapolis.

Highland Heights will be hosting a Harvest Fest on Saturday, Oct. 15 from 11 a.m. to 4 p.m. at the Highland Heights Farm at 1215 E. has accumulated over 760 Co. Rd. 650 South, Frankvolunteer hours for local fort, Indiana 46041. The fest farm could utilize more than an antique tractor show, live music, food tasting, corn hole and much more. Everyone in the community is welcome.

Overbay requested that the community help spread the word about Highland Heights and, if possible, donate to the cause at highland heightsfoundation.org.

For more information, contact Highland Heights on Facebook, email at evan@ highlandheightsfarm.com or call at 765-237-2112.



LEFT: Highland Heights hosts a variety of animals from ponies to dogs to poultry to a 4-H Ilama!

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**E8** October 8-9, 2022 Chronicle-Tribune



# Indiana farmers keep rural communities viable

INDIANA FARM BUREAU

Keeping rural communities thriving, even as more people migrate to suburban and urban centers, has always been a priority for Indiana Farm Bureau.

As the largest general farm organization in the state, INFB has a presence in all 92 counties, making it possible to assist farmers and others involved in agriculture where they live and work. Although, where Hoosiers live and work seems to have shifted in the past decade.

According to the 2020 Census data, 52 percent of Indiana counties - including most mid-sized and rural communities – lost population between 2010 and 2020. That is the largest number of Indiana counties to show a decline between censuses since the 1980s.

needed to refocus our efforts hit home when we saw the recent census data," said Andy Tauer, executive direcstate, but the majority come from rural areas. So, we're trying to make sure that the resources and businesses located in those rural areas don't suffer because of loss of population."

In December of 2021, INFB hired Colette Childress, previously from the Indiana Office of Community and Rural Affairs (OCRA), to be a local government policy advisor. Since then, she's been able to visit 32 counties in her role to help INFB members engage more in their communities and work with local governments to improve the quality of life in those areas.

"I've heard the saying before that 'If you've seen one Indiana community, you've seen one Indiana communi-

cal government is different. so I'm working to engage those communities beyond just farming," said Childress. "INFB members are more than just people on tractors. They're leaders in their communities. By using INFB's clout to help get things done at a local level, we're setting the groundwork and foundation to really make a differ-

In fact, that groundwork was set as a strategic initiative for the organization this past year to engage in infrastructure projects around the state. Whether that includes writing a letter of opposition to a proposed road project that would take away precious farmland, lobbying on a county's behalf to get a drinking water project funded, or speaking in support of repairing a grain bin at a county board of zoning ap-"The realization that we peals, INFB has shown up to advocate for members in whatever way they needed.

Recently, members in Sullivan County have taken adtor of public policy at INFB. vantage of an opportunity for from anywhere. As a result, INFB works diligently to ensure a "We know our members the city to apply for funding broadband access has become from all areas of the for a new fire station for their community. A local farmer there explained that if a fire broke out today, he could lose everything in a matter of minutes. With the grant they are seeking, it requires letters of support stating the public need for something like this, so Sullivan County Farm Bureau is preparing a letter to help support the needs of their community.

When a meat processing company wanted to purchase a vacant facility in Adams County, at first the Decatur City Council shot it down. INFB public policy team, field staff and Adams County Farm Bureau went to work to help inform the community about meat processing, engaged with the business to host tours of the

public meetings. Ultimately, those actions shifted support and helped move it through the approval process. This will be the first industrial development started in the city in 25 years, providing a big boost to the local economy.

"Keeping rural Indiana viable requires local residents the unserved and underto get more involved in solving local problems," added takes is an idea or a meeting with the right people to set progress in motion."

"Colette helped us surface issues in our area that were helpful and catalyzed things that we would have not been able to accomplish on our own," said Virgil Bremer, Rush County Farm Bureau president. "She's great to bounce ideas off. Having experience at OCRA, she really understands the funding process and how to solve local issues with funding

Since the pandemic, people have learned that they can work or attend school come a huge pain point for rural communities because animals and crops of Hoosier farmthey're losing people to ar- ers - because agriculture is vital to eas that have better internet Indiana's economy. Learn more at access.

"We are currently working on a rural broadband initiative in Henry County that would bring several different players to the table to create a broadband task force," said Lis McDonnell, Henry County Farm Bureau president. "By providing trusted policy advice to our members and setting up meetings that we wouldn't have been able to, INFB has fostered some key connections for us on the local, state and national levels that will really help improve our community in the long run."

During the 2021 legislative session, INFB surveyed facility and spoke in support members around the state

of the project at multiple about broadband. The surveved showed 97 percent of respondents said that access to reliable high-speed internet was important or extremely important to their future. INFB helped pass four different bills that ses-

sion that addressed bringing

better broadband access to

served in Indiana. "Keeping rural communi-Childress. "Sometimes all it ties viable has always been an INFB priority, we're just being more intentional and putting more resources toward that effort now," said Randy Kron, president of INFB. "We want to make sure our farmers are able to pass down their farms to the next generation. But that generation won't be here if we don't put in the effort at the local level now.'

> About Indiana Farm Bureau: For more than 100 years, Indiana Farm Bureau (INFB) has promoted agriculture in Indiana through public education, member engagement, and by advocating for agricultural and rural needs. As the state's largest general farm organization, farmer's right to farm - protecting the livelihood, land, equipment,

# **Indiana Grown** welcomes new director

PROVIDED BY THE INDIANA STATE DEPARTMENT OF **AGRICULTURE** 

and Indiana State Depart- needs. ment of Agriculture (ISDA) Director Bruce Kettler annew director of the Indiana

She was most recently Di- to the Next Level." rector of Food Nutrition at

Gov. Crouch, who is also Indiana's Secretary of Agriculture and Rural Devel-Hoosier consumers."

shop for local products. She state." will also meet with elected program and the need to businesses and livelihoods.

ditionally, she will oversee the Indiana Grown team and work with them to set and realize a strategic vision and Lt. Gov. Suzanne Crouch complete other operational

"The Indiana Grown program is an exceptional way nounced in Spetember that to promote shopping local Caroline Patrick will be the and value-added production and processing here in the Grown program and will state of Indiana," said ISDA lead its nearly 2,000 mem- Director Bruce Kettler. "I am confident under Caro-Patrick's background fo- line's leadership the Indiana cuses on culinary arts and Grown program will continlocal food procurement. ue to flourish and advance

In her previous role Community Hospital East she was instrumental in in Indianapolis where she COVID-19 care and prestarted a bistro in the hospi- cautions for the Commutal focused on local foods. nity Health Network- East Her education includes a region. Patrick placed a culinary arts degree from major focus on securing lo-The Culinary Institute of cal, fresh ingredients from America in Hyde Park, New nearby agri-businesses and farmers to give the Commu-"As its new director, I am nity Hospital East guests, excited to see where Caro- caregivers and patients the line will take the Indiana best food and nutrition pos-Grown program," said Lt. sible. She also oversaw the budget and team of nearly 80 staff members.

"I am thrilled to take on opment. "Caroline will lead the role of director for Indithe charge in elevating the ana Grown. This program is Indiana Grown program near and dear to my heart, while continuing to provide and I have tried to source value to its members and local and shop local for years in my previous roles," In this role of Indiana said Patrick. "I am looking Grown director, Patrick forward to connecting with will help to ensure Indiana members and encouraging Grown members find and entrepreneurship, awaresecure new opportunities ness and expansion for loand work to help consumers cal businesses in our great

When consumers buy officials statewide to help Indiana Grown member's them better understand the products they support local support local food-based Learn more about Indiana businesses and artisans. Ad- Grown at indianagrown.org.



Lt. Gov. Suzanne Crouch and Indiana State Department of Agriculture (ISDA) **Director Bruce** Kettler announced Thursday that Caroline Patrick will be the new director of the Indiana Grown program and will lead its nearly 2,000 members. Photo provided

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Chronicle-Tribune October 8-9, 2022 **E9** 

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**E10** October 8-9, 2022 Chronicle-Tribune

## Purdue Agriculture dashboard tracks meat sentiment in news and social media

PROVIDED BY **PURDUE UNIVERSITY** 

Purdue University's Center for Food Demand Analysis and Sustainability has added a meat sentiment dashboard to its roster of free-access food system dashboards. The new dashboard, updated weekly, shows the sentiment and volume of meat and meat alternative mentions in social media and online news.

Users may explore the sentiment and volume of #Meat mentions in all 50 states individually for social media or the entire country in a narrowly or broadly defined time range starting with April 2020 in online news and social media.

"The general perception is more positive than what the average person might guess," said Nicole Olynk Widmar, professor and associate head of agricultural economics at Purdue. During the height of the COVID-19 pandemic, for example, shoppers may have been unhappy with meat availability. Meat was available, but not always exactly what shoppers wanted when and where they want-

"Perception is going to reflect a few key headlines that may or may not have correctly reflected the state of the industry. This dashboard gives you a chance to look more holistically across the different products," she said.

The dashboard's color-coded sentiment gradient ranges from dark green for 100 percent positive to dark red for 100 percent negative. On social media in Indiana from April 2020 to July 2022, for example, poultry had a net sentiment of 49.30, followed by beef at 39.72 and pork at 37.30. Plant-based meat alternatives, meanwhile, rated a barely positive net sentiment at 3.20. The volume of relevant daily posts during this period ranged from a high of 2,955 to a low of 1,485.

"Just because information is out there doesn't mean it was right. It really was out there; it's what people saw. But that doesn't mean what they saw was 100 percent accurate."

**NICOLE OLYNK WIDMAR** Head of Agricultural Economics, Purdue University

Social Media about Beef, Pork, Poultry, and Plant-**Based Meat Alternatives** 

In the news nationwide for the same time period, poultry (three million posts) and pork (two million posts) both had net sentiments of 32. Beef came out with a positive net sentiment of 29 over one million posts. Plant-based meat alternatives had a net sentiment of 26 over 387,000 posts.

Individual companies in various industries have a profit motive to privately collect and analyze data relevant to the demand for their own products. But when it comes to big data and agriculture, "It's just sitting there and not being used as well as it could be," Widmar

Widmar discussed using social media analytics to better understand how people perceive food products such as milk and eggs, among other issues, at Purdue's "Dawn or Doom 2018" conference. In 2019, she published an article on the insights that Big Data provides into public perception of the U.S. Department of Agriculture. In 2020, Widmar and Courtney Bir of Oklahoma State University noted the various ways of using public data for the public good.

And in 2021, Widmar and four co-authors published

ural disasters can help gov- versity, Purdue could make ernment organizations identify who needs help when shortages truly occur.

The dashboard is a collaboration between Widmar and Jayson Lusk, the head is interesting beyond some because information is out and Distinguished Professor of Agricultural Economics been able to publish," she at Purdue, who leads the said. CDFAS. They conceived the meat dashboard idea following meat-market disruptions during the COVID-19 pandemic that spurred news headlines of a broken U.S. food system. Widmar and Lusk serve as co-authors of the dashboard, along with CFDAS postdoctoral research associate Jinho Jung and research data analyst and visualization specialist Annapurni Subramaniam.

CFDAS collected the data in collaboration with Net-Base Quid through its Intelligence Connector tool. An article published in the July 2022 issue of the journal Meat Science details the data-gathering methods used. The meat sentiment dashboard brings to seven the number of dashboards in the "Supply and Production" category. Also available are two Price Dashboards and two Consumer Spending Dashboards.

The methods include writing the search algorithms to exclude references to Peppa or Porky the cartoon pigs in the search for traffic about food pork, for example. Or calling someone "a chicken" or saying that someone has "a beef" with another person instead of talking about meat for eating.

The recent Meat Science article analyzed the "Perception versus reality of the COVID-19 pandemic in U.S. meat markets." In that article. Widmar and three co-authors noted wrote that "analysis of online media ly available for other peo-

of the research that we've

related to agriculture readi- social media world is messy. rate."

"Anybody can put inforthere doesn't mean it was tem it's what people saw. But data-resources/dashboards/

Widmar cautioned dash- that doesn't mean what they online and social media data board users to remember the saw was 100 percent accu-

To view the dashboard, ple to ask related questions. mation out there, so it has visit: https://ag.purdue.edu/ "That's why the dashboard caveats," she said. "Just cfdas/resource-library/meat/

To view other food sysdashboards, visit: right. It really was out there; https://ag.purdue.edu/cfdas/



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Images provided by Purdue University One side view of a corn plant in the RGB imaging booth of the Ag Alumni Seed Phenotyping Facility. From left to right: original RGB image; corn plant segmented from background; fluorescence view; and measurement.

# **Purdue phenotyping facilities offer** powerful tools with a delicate touch

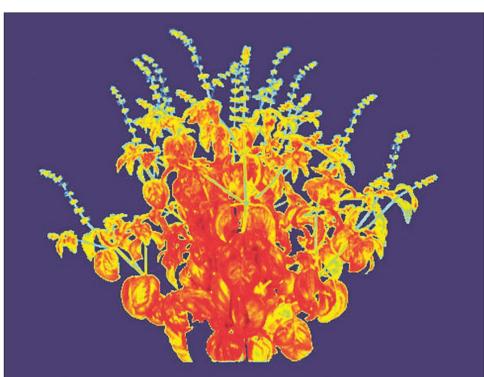
**PROVIDED BY PURDUE UNIVERSITY** 

Phenotyping at Purdue University is pushing the limits of technology, offering researchers powerful insights into plants without disturbing a single leaf.

Alumni Purdue's Ag Seed Phenotyping Facility (AAPF) is a high-throughput, controlled-environment facility equipped with multiple imaging systems and a professional team to help with experiments and data analysis.

A phenotype, an observable characteristic of an organism, is like the flip side of the record from genotype, an organism's genetic code. In addition to characteristics like height or disease resistance that may depend on a plant's genes, its phenotype might also include a plant's physical responses to changes in environmental factors such as drought or or human health." flood, rich or poor soil and pests. For plant sciences, an understanding of both the genotype and phenotype is a hit songs of that plant.

"We aim to close the gap between the rich genomic data that has been developed in the last few decades traits those genes lead to in a plant," said Yang Yang, director of digital phenomics at Purdue who leads the AAPF. "Doing so will improve crop resilience and food security and enhance the nutritional quality of what we grow. However, through digital phenomics we can do more than that. We can create tools to improve farm management and quickly identify



A hyperspectral image showing vegetative indices of a healthy basil plant. The reddish orange indicates healthy vegetation and the yellow indicates unhealthy vegetation.

The facility, a key component in Purdue's Next Moves in Plant Sciences, houses two growth chambers and complete album with all the multiple imaging systems including a color imaging system (red, green, blue, or RGB), a hyperspectral imaging system, and an X-Ray CT root scanner. All imagand an understanding of the ing systems in the facility are fully automated and integrated into a single operation management system.

#### From zero to 60 megabytes in 12 seconds: The power of digital imaging

The RGB system is like a souped-up version of the digital cameras in our cell

sion software, it becomes an beyond human perception." elite measurement machine.

In a matter of seconds, the system scans a plant and extracts an assortment of measurements from height, stem width, and number of leaves, to custom measurements for the research project, for example leaf curvature, number of particles per head of wheat, or the angle between each leaf and stem.

"This system uses digital technology to extract and record measurements in a matter of seconds that would take much, much more time if done by hand," said Yang, who has expertise in both natures of plant stress from engineering and plant physiology. "These measurements are the foundation of most experiments in the facility,

#### **Colors beyond what** the eye can see

When thinking of plants, color may be the first thing to come to mind – lush green leaves or flowers of any hue – but there are colors beyond what our eyes can see that reveal a plant's health or the presence of a threat.

"Hyperspectral imaging goes beyond the red, green and blue color bands humans can see," said Yang. "It is highly sensitive to changes in plants and can reveal sig-

See **PHENOTYPING**, page F9

# Vermillion, Huntington county farmers win Farm Bureau's top awards

INDIANA FARM BUREAU

ment Award.

riculture candidates were convention in January. judged on their involvement in agriculture, leader- Groot, Huntington Counship ability, as well as their ty, won the Achievement involvement and participa- Award, which recognizes tion in Farm Bureau and INFB members who earn other organizations. The the majority of their income Achievement Award candi- from production agriculture dates were judged on their and measures applicants on leadership abilities and their leadership involvewhat they have achieved ment and farm management with their farms.

Vermillion County, won cash prize, courtesy of Bane the Excellence in Agriculture Award, which honors

Farm Bureau members who do not derive the majority of their income from an Carter and Abby Mor- owned, production agriculgan of Vermillion County ture operation, but who acand Johan and Déjanne de tively contribute and grow Groot of Huntington Coun- their involvement in Farm ty are the winners of two of Bureau and agriculture. Indiana Farm Bureau's top The Morgans will receive awards for Young Farmers an \$11,000 cash prize, & Ag Professionals - the courtesy of Farm Credit Excellence in Agriculture Mid-America and Indiana Award and the Achieve- Farm Bureau Insurance, and an all-expenses paid Two panels of judges trip to San Juan, Puerto evaluated this year's par- Rico to compete at the 2023 ticipants. Excellence in Ag- American Farm Bureau

Johan and Déjanne de techniques. The de Groots Carter and Abby Morgan, will receive an \$11,000

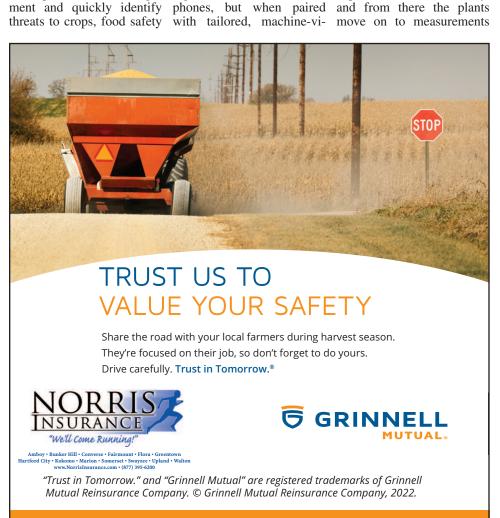
See AWARDS, page F8



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**F2** October 8-9, 2022 Chronicle-Tribune

# Political divide affects American views on food inflation

**PURDUE UNIVERSITY** 

Personal politics influences consumer perceptions of food inflation, with liberals estimating the increases at about three to four percentage points below conservatives, according to the monthly Consumer Food Insights Report.

The survey-based report out of Purdue University's Center for Food Demand Analysis and Susspending, consumer satisfaction and values, supfood policies and trust in information sources.

"The divergent perceptions of food inflation between liberals and conto observe," said Jayson Lusk, the head and Distinguished Professor of Agricultural Economics at Purdue, who leads liberals severely underin food prices from last year, but conservatives' are also likely overstating its rate for the coming year-at least compared to U.S. Department of Agriculture predictions."

Purdue experts conducted and evaluated the survey, which included 1,200 consumers across the U.S.

Additional key results include:

- Consumer food decreased expectations
- Food insecurity levdespite record high food prices.

social and environmen-

- food more than others. ■ "Local food" is politically less polarizing
- relative to concepts like "plant-based" or "climate change."

■ Both liberals and conservatives support funding for agricultural conservation and research programs.

Notably, both well-being and food happiness scales show little difference between liberals, moderates and conservatives. The political agreement over the quality of food that Americans consume highlights the success of the U.S. food system, which also shows in scores on the Sustaintainability assesses food able Food Purchasing (SFP) Index.

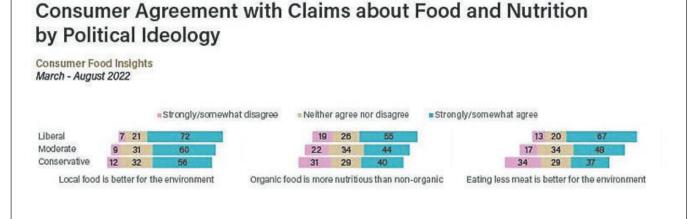
"In a country as diverse port of agricultural and as the U.S., we have been able to satisfy a great number of diets, tastes and needs," Lusk said.

The SFP, a self-reported measure of food purchasservatives is interesting ing, assesses how well consumer shopping habits mesh with healthy diets from sustainable food systems. This month's SFP index of 69 on a scale the center. "Not only are of 100 is unchanged from the July report. The onestimating the increase going stability of the SFP index shows that consumer willingness to make meat diet is not going to expectations for inflation sustainable food choices move the needle on food homes. Between one forth changes little from month to month.

Graph on Consumer about Food and Nutrition Polzin said. by Political Ideology

But even when majorities of each group agree on some aspect of food policy, such as increasing conservation funding for farmers, liberals lead conservatives by at least 15 to spending and inflation 20 points in support for more government intervention, the report said.

There also remains a els have not increased huge disagreement over the statement that "eating less meat is better ■ Liberals prioritize the for the environment." This comes despite the tal sustainability of their different environmental impacts of plants versus animals now well-established by scientific research, said Sam Polzin, a food and agricultural survey scientist for the that the summer heatwave



Climate change will impact food prices Plant-based milk is healthier than dairy milk

Source: Center for Food Demand Analysis and Sustainability

8 25

27

38

Agriculture is a large contributor to climate change

Images provided

College of Agriculture

Clothing/apparel

Consumer Agreement by Political Ideology - Purdue Center for Food Demand Analysis and Sustainability

the report.

Moderate

Conservative 22

a vegetarian or reduced given the low adoption of Agreement with Claims the political spectrum,"

> consumer-budgetlo. for consumers based on a question asking responexpenses of greatest and least concern.

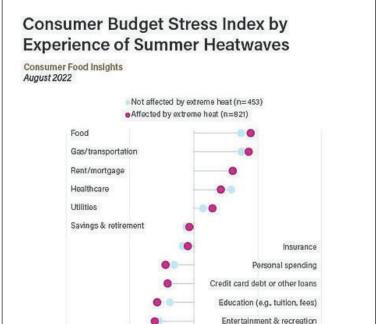
> given the high price enchanges to their shopping to adjust to prices, this gets squeezed under budget stress."

The report also showed

center and co-author of increased utility by 23 percent in many "It emphasizes the point households, put a drag that simply messaging on consumer budgets, and led Americans to be less active outside their sustainability, especially and one-half of the consumers reported spending plant-based diets across less time exercising, going shopping, eating out, and drinking alcohol. The results suggest that future jpgIn other survey find- heat waves will put greatings, food ranked as the er stress on budgets and greatest budgetary stress reduce purchasing across several areas.

The Center for Food dents to pick their three Demand Analysis and Sustainability is part of Purdue's Next Moves "We don't have previous in agriculture and food data to show whether this systems and uses innovais a recent phenomenon tive data analysis shared through user-friendly vironment," Polzin said. platforms to improve the "But, at a time when confood system. In addition sumers continue to make to the Consumer Food Insights Report, the center offers a portfolio of highlights that food is one online dashboards. For of the first essentials that more information, visit: https://ag.purdue.edu/ next-moves/areas-of-focus/food-systems/.

Written by Steve Koppes.



Source: Center for Food Demand Analysis and Sustainability

PURDUE

Consumer Budget Stress Index - Purdue Center for Food Demand Analysis and Sustainability

Budget Stress Index

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October 8-9, 2022 **F3** Chronicle-Tribune

# Assessing global biodiversity with ears to the ground, NASA eyes in the sky

Purdue research team using microphones. drones, satellites to understand changes in animal and plant diversity

**PROVIDED BY PURDUE UNIVERSITY** 

WEST LAFAYETTE, Ind. Purdue University professor Bryan Pijanowski's research team will be working in some wild and remote places around the globe in the coming year.

Pijanowski's sound-source surveyors will be equipped with microphones, headphones and parabolic reflectors to efficiently collect sound waves from the natural world. Their tools also include low-flying drones and sensors mounted on orbiting satellites and the International Space Station.

The Purdue team is utilizing these resources to develop a global model of animal and plant diversity and how it changes. They will also access Purdue's two crown jewels of global biodiversity databases. One is the Global Forest Biodiversity Initiative, a database that holds tree species inventories from more than a million plots of land. The other database, at the Center for Global Soundscapes, contains more than 4 million audio recordings from most ecosystems on

"We're using acoustic remote sensing to develop the animal biodiversity model," said Pijanowski, center di-College of Agriculture's Department of Forestry and Natural Resources. He has, acoustic sensor in the wetlands of the Purdue Wildlife ural resources. Area since 2007. And from the Southeast Asian island of cally focuses on developing



NASA Tippecanoe Soundscapes study field team in the lab's classic "Are you listening?" pose. Shown (from left) are Gabby Krochmal, Francisco Rivas Fuenzalida, Aubrey Franks, Ruth Bowers-Sword, Samantha Lima, Bryan Pijanowski, Jinha Jung, David Savage and Jingjing Liang.

Borneo alone, he has more plant-animal diversity modthan 25,00 recordings that els for four different types include sounds from 3,000 animal species.

NASA Tippecanoe Soundscapes study field team in noe County in Indiana. Pithe lab's classic "Are you listening?" pose. Shown (from area as its "sandbox," where left) are Gabby Krochmal, they go for research training Francisco Rivas Fuenzalida, Aubrey Franks, Ruth Bowers-Sword, Samantha Lima, Bryan Pijanowski, Jinha Jung, David Savage and Jingjing Liang. (Purdue University photo/Tom Campbell) Download image

The highly transdisciplinary work requires expertise in ecology, social sciences, engineering, statistics and the humanities. Project co-leads include Purdue's Kristen Bellisario, clinical assistant professor in rector and professor in the the John Martinson Honors College; Jinha Jung, assistant professor in the Lyles School of Civil Engineering; for example, maintained an and Jingjing Liang, associate professor of forestry and nat-

The NASA project specifi-

of forested ecosystems. The work starts in the deciduous forests of nearby Tippecajanowski's team uses the and protocol development. The other three sites are located in Tanzania's Miombo Woodlands, Mongolia's savanna and forest-steppe ecosystems, and the mangroves of the Sundarbans UNESCO World Heritage Site in Bangladesh.

"The Miombo Woodlands is one of the largest forest ecosystems in the world," Pijanowski said. "The Sundarbans is the location of one of the most pristine mangrove sites in the world. Mangroves and estuaries are under great threat from climate change due to rising sea levels. And Mongolia represents a mixture of coniferous forests and grasslands, which are also threatened from climate

The project will extend red. And ECOSTRESS, a late the images we get to spe-

the biodiversity models of thermal sensor, detects the all four ecosystems to other long-term studies in Borneo, Southeast Asia; Costa Rica, Caribbean; Finland, northern Europe; and Patagonia, South America.

The Purdue team's multiple data-collection platforms include three experimental sensors onboard the International Space Station.

"These are experimental sensors to map and create plant habitat models that we then calibrate with all the measurements we're making on the ground and with unmanned aerial vehicles," Pijanowski said.

The space station's Global Ecosystem Dynamics Investigation (GEDI) uses light detection and ranging (LiDAR). The DLS (German Aerospace Center) Earth-Sensing Imaging Spectrometer (DESIS) is a hyperspectral sensor that detects species composition and diversity spanning electromagnetic frequencies from visible light to infra-

drought stress condition of

Two satellite systems complement the space station sensors. These are the Moderate-Resolution Imaging Spectroradiometer (MODIS) and Landsat, which detect fires in Tanzania that affect the habitat of chimpanzees, bush babies, monkeys and

With these three space station sensors, the team gleans data on a habitat's structural complexity, species diversity and stress, which mesh with the global tree dataset.

Drones flying 80 meters above the ground provide high-resolution data (1-centimeter pixels) that allow the researchers to calibrate with the space station data. The team also conducts plant surveys at each location.

Jinha Jung and his geospatial data science group handle calibrations and linkages among ground-based, airborne and spaceborne data. 'We need to be able to re-

cific locations that Bryan is visiting and recording sound to quantify biodiversity," Jung said. "We can generate very high-resolution 3D models of those locations."

One task of Jung's group is to fill the gaps in the space station's LiDAR coverage. Orbiting at an average altitude of about 250 miles and moving at 17,500 miles per hour, the space station bounces the GEDI laser beam off the Earth's surface at intervals of about 70 me-

Jung's group also will create 3D models of all the NASA biodiversity field sites and make the 3D models available on the project website. The models will allow users to point and click on a site, zoom in and rotate the view in three dimensions.

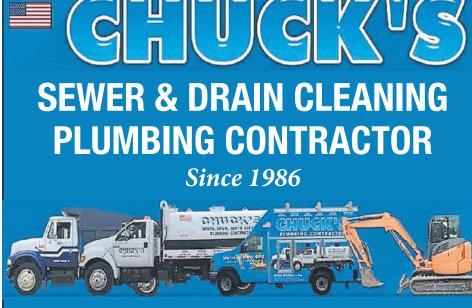
"We're going to embed recordings so visitors can visualize the site in 3D, but they can also hear the sound, almost feel like they're actually there," Jung said.

The NASA biodiversity project is part of Pijanowski's mission to record the Earth. His chorus4nature. org website connects to his entire database of global biomes, the various natural habitats where plants and animals make their home.

"People can look at all of our sites in the maps of locations where we have studies," he said. "We describe all the biomes, all the different studies, the threats to the biomes. We have a photo catalog of all the sites and videos talking about the sites and what we're doing there as scientists in action. Ultimately, we are trying to use the very best technology to solve some of society's grand challenges of species loss and climate change. Being supported by NASA makes this especially part of being a Boilermaker; Purdue is the cradle of astronauts. Perhaps, with NASA's help, we will be the cradle of solving global biodiversity chal-

Written by Steve Koppes.





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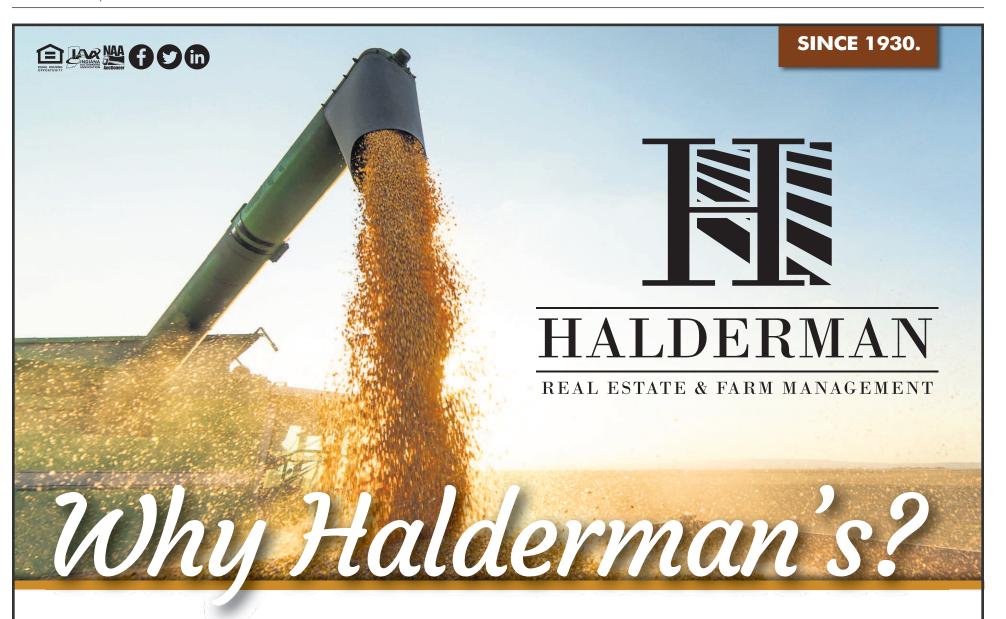
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**F6** October 8-9, 2022 Chronicle-Tribune

#### **Farmers** from across the region bring fresh produce to sell. RIGHT: Florists find success at the downtown farmers' market. BELOW: Entertainment is widespread. such as with the Frankfort

High

School





# Community reinvents downtown farmers' market

By CARL GINGERICH cgingerich@ftimes.com

The Frankfort community recently reimplemented the downtown farmers' market featuring produce, trinkets, crafts and more from across the region.

Community member Mary-Lynn Peter approached the city leaders with the idea to reinvent the farmers' market in Frankfort with local farmers from Clinton County and surrounding counties, and the city expressed its immediate approval of the project. Upon approval, the first farmers' market was set for Aug. 13 at Veterans' Park in Frankfort. Given the community involvement, the farmers' market will continue on every Saturday from 9 a.m. to 1 p.m. at Veterans' Park throughout the season.

The farmers' market is located in Frankfort and features farmers from Flora, Burlington, Lafayette, Lebanon, Kokomo and more. Peter expressed hope that more vendors from across the region will attend in the future.

Peter claimed that numerous vendors were experiencing a high volume of sales, and many vendors sold out of their items during the almost five years, but after seeing a man selling tomatoes in the downtown area, she reimagined the idea at Veterans' Park.

... at Ivy Tech where no one could get to it. So, that kind of went out of the way," said Peter. "(I thought), Veterans' Park sits there empty on Saturdays. It's just sitting there ... why can't we use that? It'd be a perfect place. There's plenty of parking, and it's right downtown where people can see it."

Frankfort Mayor Judy



Photos courtesy of MaryLynn Peter

Local merchants gather to sell produce and handmade goods.

garding the new location and support. People can't wait. the benefit to the community. Sheets commented that the previous location was not ideal but utilizing Veterans' Park will bring yet another up," said Peter. "I've got a downtown event for the community inside the parks.

"I think it's a great idea. As years, so I think that move to Ivy Tech wasn't a very successful location," said Sheets. "I think Veterans' Park would be a really good location."

The farmers' market will allow for community members to sell and purchase flowers, vegetables, homebaked goods, honey, eggs and much more. For items such as eggs and frozen chicken, Peter cited that the sellers day. Peter commented that will be required to obtain a flea market. I want a true the farmers market was not a permit from the Clinton farmers market," said Peter. operational in Frankfort for County Health Department, which costs \$60 for the entire season. Uncut produce and similar items such as watermelon, tomatoes, cucumbers and more will not require the "We used to have farmers seller to obtain a permit, but markets downtown at first the merchant will be required to complete a form for registration.

> Before the first farmers market began, Peter commented that the community has supported the idea on social media and numerous potential sellers had already begun obtaining permits and contact MaryLynn Peter on preparing for the upcoming markets.

"I've mentioned it on Face-Sheets agreed with Peter re- book, and I've got tons of group.

It may start out slow-maybe not a whole lot of people selling their things-but once word gets out, it will pick couple people really excited about coming out and selling their stuff. One of them you said, we did that in prior has already gone and got her permit, and she's all excited and baking away right now, I'm sure."

> Peter expressed that she intends to limit the farmers market to the sale of fruits, vegetables, baked goods, farm-raised products and more but will not allow stands of trinkets, jewelry and other goods typically associated with a flea market.

"I don't want to treat it as "I want it to be a true farmers market where people can go to get their fruits and their vegetables and baked goods."

The market has showcased numerous musical acts, such as the Frankfort High School orchestra and local bands. The market typically encourages local businesses to provide refreshments and food for visitors as well.

For more information, visit the farmers' market at Veterans' Park at 101 E. 1st St., Frankfort, Indiana 46041, or Facebook or visit the Frankfort Farmers Market (New and Improved!) Facebook



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October 8-9, 2022 **F7** Chronicle-Tribune



George Naylor looks over organic apples grown on his farm, Tuesday, Sept. 13, near Churdan, Iowa. Naylor, along with his wife Patti, began the transition to organic crops in 2014. The demand for organics has increased so fast that the U.S. Department of Agriculture last month committed up to \$300 million to help farmers switch from conventional crops.

# More consumers buying organic, but U.S. farmers still wary

By SCOTT MCFETRIDGE

**Associated Press** 

CHURDAN, Iowa – In the 1970s when George Naylor said he wanted to grow organic crops, the idea didn't go over well.

Back then organic crops were an oddity, destined for health food stores or maybe a few farmers markets.

"I told my dad I wanted to be an organic farmer and he goes, 'Ha, ha, ha,'" Naylor said, noting it wasn't until 2014 that he could embrace his dream and begin transitioning from standard to organic crops.

But over the decades, something unexpected happened - demand for organics started increasing so fast that it began outstripping the supply produced in the U.S.

Now a new challenge has emerged: It's not getting consumers to pay the higher prices, it's convincing enough farmers to get past their organic reluctance and revenue pouring in.

the demand, the number of heart surgeon." farmers converting to organof Agriculture committed the switch.

Schreiner, executive direc- farmers must control weeds tor of the organic-certifying and pests with techniques organization Oregon Tilth, such as rotating different many barriers to farmers referring to the government help. "It's a milestone in the arc of this work."

Schreiner, who has worked the soil. at the Oregon-based organization since 1998, said exis important given the vast converting a convention- panies organic crops.



start taking advantage of the George Naylor holds an organic apple grown on his farm.

genetically modified seeds. they are banned at organ-"It feels good," said Chris ic farms. Instead, organic crops and planting cover crops that squeeze out weeds and add nutrients to

Crops can only be deemed organic if they are grown on panding technical training land that hasn't been treated with synthetic substances differences in farming land for three years. During that conventionally and organi- period, farmers can grow cally. Schreiner noted that crops, but they won't get the one farmer told him that extra premium that accom-

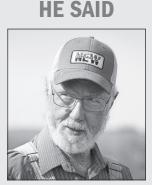
Instead of growing to meet "a foot doctor to become a the number of conventional this year. farms newly transitioning to That growth is clear to The key difference is the organic production dropped ic is actually dropping. Last use of synthetic fertilizers by about 70 percent from month, the U.S. Department and pesticides as well as 2008 to 2019. Organic comprises about 6 percent of up to \$300 million to recruit Most conventional farms overall food sales, but only and help more farmers make rely on those practices but 1 percent of the country's farmland is in organic production, with foreign producers making up the gap.

In the U.S, "There are so making that leap to organic," said Megan DeBates, vice president of government affairs for the Organic Trade Association.

While farmers seem hesitant, U.S. consumers aren't. Annual sales of organic products have roughly doubled in the past decade and now top \$63 billion, according to the Organic Trade Association. Sales are project-

past bins of organic apples and bananas, through dairy and egg sections and along shelves brimming with organic beef and chicken.

The new USDA effort would include \$100 million toward helping farmers learn new techniques for growing organic crops; \$75 million for farmers who meet new conservation practice standards; \$25 million to expand crop insurance options and reduce costs; and \$100 million to aid organic supply times for him and his farm-



clover on their farm,

"I told my dad I wanted to be an organic farmer and he goes, 'Ha, ha, ha."

**GEORGE NAYLOR** 



George Naylor and his wife Patti walk through a cover crop of



"It really helps to believe in what you're doing."

**PATTI NAYLOR** 

for organics.

State University extension of Des Moines to use solely agent who works with organ- for organic crops, the kind ic farmers, called the USDA of project the USDA proshould be especially attracanyone pushing a cart in crops makes it possible to an average supermarket, make significant money off even 25 to 100 acre (10 to activity is gratifying for 40 hectare) farms – much smaller than the commercial operations that provide most of the country's produce.

"I've seen organic farmers keep families in business who otherwise would go out

of business," Andrews said. Noah Wendt, who in the past few years has transitioned 1,500 acres (607 hectares) of land in central Iowa to organic, noted the shift has been "rocky" at

chains and develop markets ing partner, Caleb Akin.

But he and Akin recently Nick Andrews, an Oregon bought a grain elevator east effort a "game changer." It gram can assist. They hope the elevator will not only be tive to farmers with small a nearby spot to store grain parcels of land because but provide a one-stop shop the added value of organic to learn about growing and marketing organic crops.

Seeing all the organic George and Patti Naylor, who farm near the tiny central Iowa community of Churdan. But they say they still value most the simple benefits of their choice, such as evenings spent watching hundreds of rare monarch butterflies that flock to their herbicide-free farm.

As Patti Naylor put it, "It really helps to believe in what you're doing.'

Follow Scott McFetridge on Twitter: https://twitter.com/smcfetridge





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**F8** October 8-9, 2022 Chronicle-Tribune

# **Indiana farm fatality summary shows** positive trends, stresses worker safety

**PURDUE UNIVERSITY** 

WEST LAFAYETTE -Purdue University's Agricultural Safety and Health Program released the annual Indiana Farm Fatality Summary with Historical Overview, coinciding with National Farm Safety and Health Week. The annual observance has taken place during the third week of September since 1944.

The program reported 20 work-related on-farm deaths in the state of Indiana in 2021. Data shows that tractors are the most common agent in farm-related fatalities, representing as many as 52 percent of documented cases in the past 10 years, with six reported cases in 2021. Other causes included grain entrapment, equipment jury incident that requires

runovers and entanglements, medical attention. and asphyxiation by fumes in confined spaces.

This shows a decrease from the 25 cases identified in 2020 and marks the fewest cases reported in the past eight years. Farm fatalities for the past 50 years continue to trend lower, likely reflecting safer machinery and work practices while also corresponding with a decline in the number of farmers.

Despite this positive trend, program members urge agricultural workers to remain diligent and follow safety protocols. No Indiana agency requires official documentation of farm-related injuries or fatalities, but prior Purdue research has indicated that each year approximately 1 in 9 Indiana farms has a farmwork-related in-

Documented incidents involving those age 60 or older account for nearly half of all cases in the past five years, including 40 percent in 2021.

"Historically, farmers over the age of 60, including many who work only parttime, have accounted for a disproportionate number of farm-related injuries. Recent spikes in frequencies minder that we should never of fatalities over the past 10 years make this population of older farmers a special concern," the report states.

Males account for most fatalities, with only one female fatality recorded in 2021. One victim was a child, but historical data shows an overall decline in the frequency of farm-related fatalities involving children and

EdSheldon,reportco-author

and Purdue agricultural safety specialist, said, "It is encouraging that the average number of annual farm-related fatalities continues to decline. That said, in 2021, at least 20 Indiana families and communities felt the devastating impact of losing one of their own to a farmwork-related death.

"That's a very somber rebecome complacent in our efforts to make our farms safer places to live and work."

As Hoosier farmers begin to harvest, program members remind farmers to keep safety a top priority. Agriculture safety guides, disaster preparedness resources and the Indiana Farm Fatality Summary can be found on-

Written by Ashvini Malshe.

#### **AWARDS**

From page F1

Welker Equipment and Indias well as an all-expenses paid trip to compete at the 2023 American Farm Bu-Puerto Rico in January. The de Groots also will be awarded the David L. Leising Memorial Award

Winners and finalists will be formally recognized during the INFB state convention in December. Learn more about this year's winners below.

#### Carter and Abby Morgan, **Vermillion County**

Carter and Abby Morgan their love of agriculture. Carter's started at a young age corn, soybeans and wheat. Abby got her start in agriof 4-H. They both attended Purdue University earning ing decisions. degrees in agriculture.

promotes conservation practices such as no-till, cover to do better." crops and conservation management.

"Conservation is very imhealthy is critical to allowing the farm."

Abby works as the 4-H Ex-County. She serves over 600 youth from kindergarvolunteers.

In addition to their involveactive Farm Bureau members, with Carter having also served on the Vermillion County Farm Bureau serves on the board as secre-

2013 to 2021.

"Carter and I applied for the Excellence in Ag award because we want to give back to the ag industry and ana Farm Bureau Insurance, inspire the next generation of leaders," said Abby. "We wanted to have a platform to talk about issues impacting reau convention in San Juan, agriculture and help provide solutions to those issues."

#### Johan and Déjanne de Groot, **Huntington County**

The de Groots own a diversified farm operation, which includes a large dairy farm of approximately 2,600 cows, as well as acreage for alfalfa and corn production. Both are natives of Holland. Johan moved to the U.S. in 2002 with his family to start took different paths to find the dairy farm. He graduated from Michigan State University where he studas the fourth generation on ied dairy production. Johan the family farm producing manages the employees and multiple aspects of the farm, including a robotics facility. culture by showing sheep as He also oversees the breeda first-generation member ing program, manages crop rotations, and makes plant-

"I have always enjoyed In addition to farming with farming, even since I was his family, Carter serves as a little kid," said Johan. "I soil health consultant at the enjoy working with living local Soil and Water Con- animals, putting seed in the servation District where he ground, encouraging employees and always striving

After completing internships in the U.S., Déjanne finished her studies in agriportant to our farm," said cultural entrepreneurship in Carter. "Keeping our soil in Holland and officially joined place and keeping our soil Johan to run the family operation in 2018. Déjanne is the next generation to be in- responsible for all the bookvolved in agriculture and on work, payroll and overseeing the heifer operation.

One of the de Groot's goals tension educator for Purdue for the future is expanding Extension in Montgomery the farm with an agritourism component.

"We want to have people ten through 12th grade and come out to the farm," said manages nearly 100 adult Déjanne. "They could visit with the cows, see how they get milked, learn what they ment in 4-H and their local eat, and maybe we'll create church, the Morgans are a small market for milk, yogurt and ice cream."

The de Groots are active served as a member of the Farm Bureau members. Both county's board of directors chair the Huntington County since 2013. The Morgans Farm Bureau YF&AP Committee, and Déjanne also

# Purdue Student Farm collaborates with campus cultural centers

**PROVIDED BY PURDUE UNIVERSITY** 

Located on the edge of Purdue's campus, the Student Farm emphasizes the education of undergraduate students through sustainable methods. Student groups enrolled in the "Small Farms Experience" courses manage day-to-day farm operation, with volunteers from the Purdue Student Farm Organization, part-time undergraduate interns and fulltime undergraduate summer interns.

Since 2018, the Student Farm manager, Chris Adair, has collaborated with the Latino Cultural Center (LCC) to provide vegetable plants for an on-campus garden next to the center.tomatillo-salsa-recipe-card.jpg

"The Latino Cultural Center's garden was started by graduate students in the College of Agriculture to help remind LatinX students, faculty and staff the importance that agriculture plays in our legend and tradition. cultural heritage," says Carina Olaru, director of the "Since then, we have created Mercadito Martes or 'farmers market Tuesdays' and provide free produce to anyone in the community."

Every Tuesday during the school year students will harvest crops from the cultural center's garden and create recipe and nutrition cards to hand out on the corner of University and 5th Street. One of the most recent recipes provided was tomatillo salsa, using onions, cilantro, jalapenos and tomatillos from the garden.

Since the initial stages of collaboration with the Latino Cultural Center, Chris Adair, has also connected with both the Native American Educational and Cultural Center (NAECC) and the Asian American and Asian Resource and Cultural Center (AAARCC) to assist with

on-campus gardens. "This season the NAECC



for these garden plots and

hope to be more intentional

with the seeds and crops we

For more information visit:

https://www.purdue.edu/hla/

choose," says Rosselli.

sites/studentfarm/

From left, Chris Adair, Carina Olaru, Felica Ahasteen-Bryant (Diné) and Pamela K. Sari stand near NAECC's Three Sisters Garden.

was very intentional with their garden," said Adair. The NAECC chose to plant seeds from tribal nation seed banks to create a Three Sisters Garden.

The crops corn, beans and squash are known as the Three Sisters, and for centuries these crops have been at the center of Native American agriculture and culinary

"The Student Farm provided guidance and support to start our Three Sisters Garden," said Felica Ahasteen-Bryant (Diné), director of the NAECC. "We specifically chose different varieties of seeds to honor our tribal nations, including Hopi corn and Cherokee beans. The tribal nation seeds provide a special connection to our ancestors and the garden gives us nourishment and a physical and spiritual connection with the

land." The AAARCC has a popup pantry location, and the original goal of creating a garden was to provide fresh vegetables. This year, the AAARCC connected with students to plan a more intentional garden by requesting stories about how herbs and spices are meaningful to

"Since the start of the garden in 2021, it became clear that we should explore learn-

ing purpose gardens to help students, faculty, and staff reconnect with their personal and community history around food and garden, and to understand more systemic issues such as food insecurity," says Pamela K. Sari, director of the AAARCC. "Chris has been very generous with sharing knowledge and introduced the importance of not only planning your garden, but also telling the stories behind our food.'

space for a garden plot, so Adair assisted with education about container gardening and an indoor hydroponics set up.

"The Student Farm starts many plants using the greenhouses located in the Horticulture Plant Growth Facility on campus, and students not only plant but help to manage and care the gardens as well," said Adair. "Timing is such an important factor, and we hope to make incre-

the years." Recent Sustainable Farming and Food Systems graduate, Alfonso Rosselli, has been working with the Student Farm for three years and looks forward to helping plan the cultural center gardens to grow specific culturally connected produce.

mental improvements over

"Both Chris and I are looking towards the future





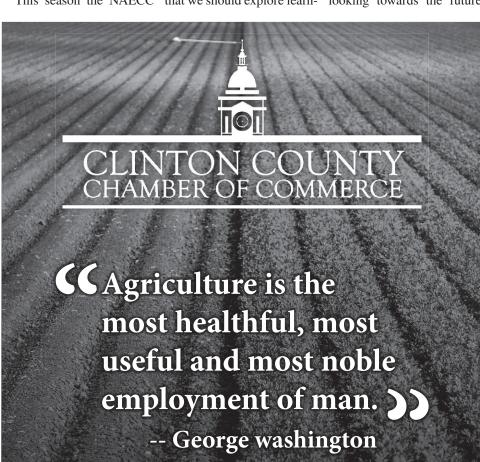


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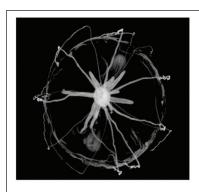


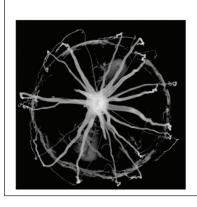
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October 8-9, 2022 **F9** Chronicle-Tribune





different pests, diseases or envi-

system extract traits identified

through the light reflectance from

A dual pair of hyperspectral

cameras can capture the full spectrum of optical sensing from both

seedlings to a 15-foot corn plant.

"This system offers the power to

look into the physiological charac-

teristics of a plant without having

to sacrifice it for chemical analy-

sis," he said. "It also allows a re-

different growth stages. Plants are

dynamic and a lot changes over its

The AAPF team has helped re-

searchers identify plant stress

from heavy metal toxicity, insect

stress, as well as examine wa-

"The possibilities are up to the

creativity of the scientist," he

said. "This facility was designed

to push the envelope of research

begun to explore its capabilities."

X-ray vision reveals roots

Purdue is the only academic

phenotyping facility in the na-

imaging

**PHENOTYPING** 

ronmental challenges."

different wavelengths.

The hyperspectral

From page F1

lifetime."

plants, Yang said.





high-throughput X-ray computed tomography (CT) root scanner, Yang said. The system combines sional representation of the root architecture.

"This is the future for root studies," Yang said. "It allows one to see the root system without disturbing the roots. We've achieved a resolution of 100 microns, which lets us see very fine roots, plant is and ensures a plant keeps which puts us far ahead of many top and side views of a plant, from other institutions."

Plants can be grown in traditional potting media, and researchers chambers provide environment can observe and measure the roots in which air temperatures, atmowithout having to dig up, wash and manipulate them, he said. The system can measure an array searcher to follow a single plant or of root traits, such as root length, stress signal of the plant through thickness, total volume by depth, root diameter and the angle of crown root.

Purdue's X-ray CT system generates vast amounts of high-quality data throughout a plant's life cycle. As with the other imaging systems, the AAPF team develter and nutrient contents within ops algorithms and data-pipelines to extract the traits of interests from the images. The team published a paper in the journal Plant Agronomy Center for Research Methods detailing their model and method to digitize root testing facility near campus. The activities, and we have only just data.

both above and below ground to better understand how their gene ica. of interest impacts the growth of a tion to offer a fully automated, plant," Yang said.



Photos courtesy of the Ag Alumni Seed Phenotyping Facility / Purdue University LEFT: 3D reconstruction of corn roots to provide image analysis output including total root volume, root length and depth distribution of roots. ABOVE: 3D reconstruction of corn roots to provide image analysis output including total root volume, root length and depth distribution of roots.

#### Walking plants

A conveyer belt winds its way many images into one 3-Dimen- throughout the AAPF facility, moving plants from growth chambers to the imaging stations and back.

> Each plant has its own unique digital mark. The automated system tracks the digital mark and lets the team know where every to its scheduled imaging.

Two growth chambers hold 620 plants up to 13 feet tall. The spheric humidity, carbon dioxide for Research and Education (ACRE). level, and lighting can be maintained consistently, Yang said. vehicles, or drones, and a field ment supporting plant analysis, An automated irrigation system rover equipped with sensors. In including a high-speed seed sorter manages plant fertigation using a weight-based method.

"Purdue's team created an inworld" Yang said.

#### Field testing

the Indiana Corn and Soybean Innovation Center (ICSC) at the and Education, or ACRE, a field center, which also is part of Pur-"Through our imaging systems due's Next Moves in Plant Sciencplant scientists can see a plant es, is the first field phenotyping facility of its kind in North Amer-

> Through the center researchers have access to unmanned aerial



Tom Campbell / Purdue University

The Indiana Corn and Soybean Innovation Center (ICSC) at the Agronomy Center

addition to cameras and hyper- that records the length, width and spectral sensors, the drones offer color of each seed, as well as an light detection and ranging units, ear photometry box that measures tegrated system drawing from or LiDAR sensors. LiDAR evalu- more than 30 physical traits of an the best technologies around the ates the range between the scan- ear of corn, and a root scanner. ning system and objects using the In addition, it offers stations and time it takes for the signal to travel equipment for sample preparato objects and back to the sensor. tion including threshing, shelling, Yang also leads efforts within It works like radar, but uses light from a laser as the signal.

> expertise in remote sensing, a support team is available to provide data acquisition and processing.

center is a gantry, a bridge-like structure that supports moveable test models at different scales. sensors over a small plot of land to gather data on plants throughout the days.

The center also offers equip-

grinding and treating.

"These phenotyping facilities For researchers who don't have combine to create a multiscale research pipeline," Yang said. "They enable Purdue's scientists to take research from a highly controlled Just outside the backdoors of the environment to a full-scale field - to make new connections and We have and are continuing to build the infrastructure to pursue ground-breaking research.'

Written by Elizabeth Gardner.



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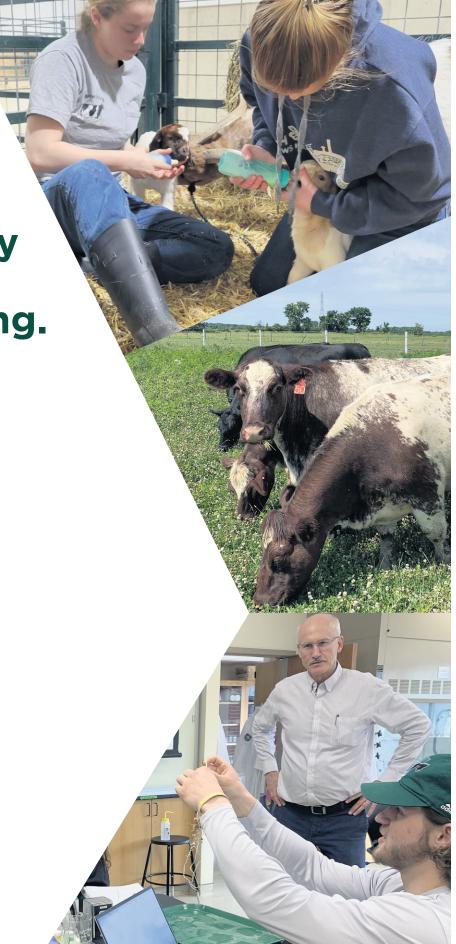
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# Purdue to boost climate-smart forestry practices among private landowners

**PROVIDED BY PURDUE UNIVERSITY** 

WEST LAFAYETTE — Purdue University has received \$12 million of a \$35 million project led by the American Forest Foundation and funded by the U.S. Department of Agriculture's Partnership for Climate Smart Commodities to help family forest owners practice climate-smart forestry in Indiana and eight other states throughout the eastern half of the U.S.

The project's other partners are The Nature Conservancy, the Center for Heirs Property Preservation, and Women Owning Woodlands. The project could sequester an estimated 4.9 million tons of atmospheric carbon - a greenhouse gas that affects climate – over a 20-30-year period.

"Our digital forestry group has been working on various tools and thinking about how to apply these tools to real-life problems," said

Songlin Fei, who directs Purdue's Integrated Digital Forestry Initiative. "This is an opportunity to apply our expertise to solving part of the climate-change puzzle."

Purdue's cross-disciplinary Integrated Digital Forestry Initiative includes faculty members from the colleges of Agriculture, Engineering, Science, Liberal Arts and Libraries and the Polytechnic Institute. The Integrated Digital Forestry Initiative, one of the five strategic investments in Purdue's Next Moves, leverages digital technology and multidisciplinary expertise to measure, monitor and manage urban and rural forests to maximize social, economic and ecological benefits.

"We're bringing a traditional field into the digital age," said Fei, professor, forestry and natural resources, and Dean's Chair of Remote

Purdue will use advanced digital forestry technologies



Purdue Integrated Digital Forestry Initiative High resolution aerial photo captured by a drone shows individual trees at Martell Forest in West Lafayette, Indiana.

to do the measurement, monitoring, reporting and verification of carbon sequestrations that the project requires. The automated technology, applied at a regional scale with unprecedented accuracy, will be based on data collected by satellites and drones with various sensors, such as light detection and ranging (LiDAR). The team will also develop a simulation system that will utilize artificial intelligence

management scenarios.

web-based tool that landowners can use to estimate and predict the climate-smart to enroll 1,600 landowners, commodity market potential of their properties. The team is also building a smartphone-based app for tree measurement and monitor-

American families own American Forest Foundation

more carbon, Fei said.

Landowners will receive economic incentives for par-Payment to landowners will depend on which climate-smart carbon practicconsulting foresters will also provide landowners technical advice and guidance in estab-

who control a total of over 160,000 acres -about 250 square miles – of family forests, into the Family Forest forest landowners, and en-Carbon Program (FFCP), which was developed by the

nearly 40 percent of the na- and The Nature Conservantion's forests, yet few of them cy. The foundation and the take part in forest carbon conservancy will make speprojects or work from a man-cial efforts to recruit rural, agement plan. However, with minority and women forest proper management, trees landowners in collaboration can grow faster and sequester with the Center for Heirs Property Preservation and Women Owning Woodlands.

The FFCP already operates ticipating in the program. in a dozen states in the upper Midwest and the Northeast. The USDA grant will bring nine more states into es they use. Project staff or the FFCP: Indiana, Ohio, Kentucky, Tennessee, Virginia, North Carolina, South Carolina, Georgia and Ala-The work will result in a lishing a forest management bama. In several states, such as Indiana, hardwood-related The project partners aim commodities contribute significantly to the economy.

"This grant allows us to combat climate change, put technology into the hands of gage underserved and rural Americans," Fei said.

Written by Steve Koppes.







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